## **EXHIBIT A**

# PARTIES' JOINT CLAIM CONSTRUCTION CHART FOR FAMILY 2 PATENTS

Disputed Claim Term	Patent, Asserted Claims	Plaintiff's Proposed Construction	<b>Defendants' Proposed Construction</b>
"transceiver"	'881 patent, claims 17, 18 '028 patent, claims 1, 2 '706 patent, claims 1, 2 '511 patent, claims 2, 6	"communications device capable of transmitting and receiving data wherein the transmitter portion and receiver portion share at least some common circuitry"  Intrinsic Evidence:  Ex. B ('881 patent), Fig. 2.1	"communications device capable of transmitting and receiving data"  Intrinsic Evidence:  '881 patent, Fig. 1, 2; col. 1:26-56; col. 1:60-2:5; col. 3:58-4:5.
"plurality of bonded transceivers"	'881 patent, claims 17, 18 '028 patent, claims 1, 2	"two or more transceivers configurable to be located on the same side of two or more physical links where each transceiver is configurable to transmit or receive a different portion of the same bit stream via a different one of the physical links"  Intrinsic Evidence:  See, e.g., Ex. B ('881 patent), Figs. 2-12, 1:60 – 2:5, 4:15-18, 4:29-33, 4:52-56, 4:62 – 5:9, and 5:22-67.	"two or more transceivers, each corresponding to a physical link, coordinated to transmit or receive a different portion of the same bit stream via a different one of the physical links" Intrinsic Evidence:  '881 patent, Fig. 2; col. 1:42-56; col. 1:60-2:5; col. 2:10-19; col. 3:58-4:38; col. 4:57-5:6; col. 5:44-52; col. 10:54-58; col. 11:31-34.  Ex. F, '881 File History, Examiner's Interview Summary for March 15, 2007.
"combine multiple DSL transceivers"/ "combined multiple DSL	'706 patent, claims 1, 2 '511 patent, claims 2, 6	"locate two or more DSL transceivers on the same side of two or more physical links where each transceiver is configured to transmit or receive a different portion of the same bit stream	The preambles of these claims are limiting.  "locate at least two DSL transceivers, each corresponding to a physical link, on the same communications node so that

<sup>1</sup> The '881, '028, '706, and '511 patents share a common disclosure. For brevity, TQ Delta cites only to the '881 patent. Citations to other patents are noted in the charts.

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Disputed	Patent, Asserted Claims	Plaintiff's Proposed Construction	<b>Defendants' Proposed Construction</b>
transceivers"		via a different one of the physical links" / "two or more DSL transceivers configurable to be located on the same side of two or more physical links where each transceiver is configurable to transmit or receive a different portion of the same bit stream via a different one of the physical links"  Intrinsic Evidence:  See, e.g., Ex. B ('881 patent), Figs. 2-12, 1:60 – 2:5, 4:15-18, 4:29-33, 4:52-56, 4:62 – 5:9, and 5:22-67.	they are coordinated to transmit or receive a different portion of the same bit stream via a different one of the physical links"/ "at least two DSL transceivers, each corresponding to a physical link, located on the same communications node and coordinated to transmit or receive a different portion of the same bit stream via a different one of the physical links"  Intrinsic Evidence:  '881 patent, Fig. 2; col. 1:42-56; col. 1:60-2:5; col. 2:10-19; col. 3:25-39; col. 3:58-4:38; col. 4:62-5:6; col. 5:44-52; col. 10:54-58; col. 11:31-34.  '511 patent, col. 11:4-16; col. 11:46-62.  Ex. F - '881 File History, Examiner's Interview Summary for March 15, 2007.
"utilizing at least one transmission parameter value to reduce a difference in latency between the bonded transceivers"	'881 patent, claims 17, 18 '028 patent, claims 1, 2	"to set a value of at least one parameter used for transmission to reduce the difference between the latencies of the respective bonded transceivers"  Intrinsic Evidence:  Ex. B ('881 patent), 6:1-16 and 6:56 – 7:36.	"configuring at least one transmission parameter value to minimize the difference in the configuration latencies between the bonded transceivers"  Intrinsic Evidence:  '881 patent, Fig. 15; col. 5:23-42; col. 6:1-35; col. 6:56-7:36; col. 10:40-47.  Ex. F - '881 Patent File History – Office Action dated 10/18/2006; Amendment dated 2/28/2007.  Ex. G - '706 Patent File History – Office Action dated 1/10/2011; Amdmt and

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Disputed Claim Term	Patent, Asserted Claims	Plaintiff's Proposed Construction	<b>Defendants' Proposed Construction</b>
			Response Dated 2/11/2011.  Ex. H - '511 Patent File History – Office Action dated 2/15/2011; Amdmt and Resp. dated 8/11/2011; Office Action dated Nov. 18, 2011; Amdmt dated May 14, 2012
"utilizing at least one transmission parameter value to reduce a difference in latency between the multiple DSL transceivers"	'706 patent, claims 1, 2 '511 patent, claim 6	"to set a value of at least one parameter used for transmission to reduce the difference between the latencies of the respective multiple DSL transceivers"  Intrinsic Evidence:  Ex. B ('881 patent), 6:1-16 and 6:56 – 7:36.	"configuring at least one transmission parameter value to minimize the difference in configuration latencies between the multiple DSL transceivers"  Intrinsic Evidence:  '881 patent, Fig. 15; col. 5:23-42; col. 6:1-35; col. 6:56-7:36; col. 10:40-47.  Ex. F - '881 Patent File History – Office Action dated 10/18/2006; Amendment dated 2/28/2007.  Ex. G - '706 Patent File History – Office Action dated 1/10/2011; Amdmt and Response Dated 2/11/2011.  Ex. H - '511 Patent File History – Office Action dated 2/15/2011; Amdmt and Resp. dated 8/11/2011; Office Action dated Nov. 18, 2011; Amdmt dated May 14, 2012
"determining at least one transmission parameter value to reduce a	'511 patent, claim 2	"to determine a value of at least one parameter used for transmission to reduce the difference between the latencies of the respective multiple DSL	"computing at least one transmission parameter value to minimize the difference between the configuration latencies of the multiple DSL

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Disputed Claim Term	Patent, Asserted Claims	Plaintiff's Proposed Construction	<b>Defendants' Proposed Construction</b>
difference in		transceivers"	transceivers"
latency between the multiple DSL transceivers"		Intrinsic Evidence:	Intrinsic Evidence:
		Ex. B ('881 patent), 6:1-16 and 6:56 – 7:36.	'881 patent, Fig. 15; col. 5:23-42; col. 6:1-35; col. 6:56-7:36; col. 10:40-47.
			'511 patent, Fig. 16; col. 10:58-11:3; col. 11:42-46.
			Ex. F - '881 Patent File History – Office Action dated 10/18/2006; Amendment dated 2/28/2007.
			Ex. G - '706 Patent File History – Office Action dated 1/10/2011; Amdmt and Response Dated 2/11/2011.
			Ex. H - '511 Patent File History – Office Action dated 2/15/2011; Amdmt and Resp. dated 8/11/2011; Office Action dated Nov. 18, 2011; Amdmt dated May 14, 2012; Office Action dated August 16,
			2012; Amdmt dated 9/4/2012.